Amendments to the Specification:

Please delete paragraph number [0004] beginning on page 1 with the words "The method most widely used" and extending through the end of Table 1 on page 2.

Please insert the following new paragraph on page 1 immediately after the heading "Prior art":

The method most widely used for analysing nucleic acid sequences is the enzymatic "chain termination" technique, developed by Sanger et al. in Proceedings of National Academy of Science, 74, 1977, p. 5463-5467 [1]. It is based on the properties of DNA-dependent DNA polymerases to create DNA polymers complementary to the sequence of a DNA strand serving as a template, from a mixture of natural nucleoside triphosphate monomers. The process consists, starting with the DNA strand to be analysed, in making a series of copies of the complementary strand by adding to the conventional reaction medium molecules known as "chain terminators" and then analysing the length of the newly formed strands to determine the base sequence of the template. The principle of the method is explained in Table 1 shown as Figure 5.

Please delete paragraph number [0006] beginning on page 3 with the words "On the other hand" and extending through the end of Table 2 on page 4.

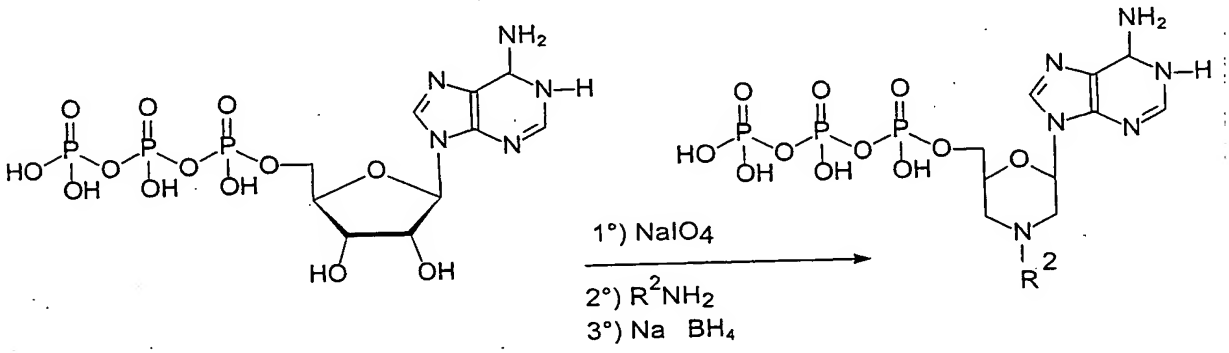
Please insert the following new paragraph on page 3 immediately after paragraph number [0005]:

On the other hand, if a molecule which is recognized by the polymerase but which has no free 3'-OH terminal end is added to the reaction medium, each time this molecule is incorporated, the polymerization work of the enzyme will be interrupted because the chain can no longer grow on account of the absence of a site available to attach a new nucleotide (creation of interrupted newly-formed strands). This is illustrated in Table 2 shown as Figure 6 with 3'-deoxythymidine 5'-triphosphate.

Please delete paragraph number [0039] beginning on page 12 with the words "The nucleotide derivatives" and extending through the reaction scheme.

Please insert the following new paragraph on page 12 immediately before paragraph number [0040]:

The nucleotide derivatives used in the process of the invention may be prepared in a single step, directly from ribonucleoside triphosphates, according to the following reaction scheme illustrated with R^1 representing adenine.



Please replace paragraph number [0055] on page 14 with the following amended paragraph:

Figure 3 is a scheme illustrating the result on polyacrylamide gel of a test for monitoring the elongation of an oligonucleotide [[A]] B and the incorporation of morpholino A putrescine.

Please insert the following three new paragraphs immediately after paragraph number [0055] on page 14:

Figure 4 is a scheme illustrating the result on polyacrylamide gel of a test for monitoring the elongation of an oligonucleotide A and the incorporation of morpholino A putrescine or morpholino A fluorescein.

Figure 5 illustrates hybridization of a primer strand with a DNA template strand followed by incorporation of 5′ thymidine triphosphate into the primer strand by a DNA polymerase.

Figure 6 illustrates hybridization of a primer strand with a DNA template strand followed by incorporation of 3′-deoxythymidine 5′-triphosphate into the primer strand by a DNA polymerase.

Please replace paragraph number [0242] on page 47 with the following amended paragraph:

Before adding the enzyme, the mixture is denatured at 94°C for 5 minutes. It is then left to return to ambient temperature in order for the hybridization to take place. The elongation is carried out at 70°C for the Taq and at 37°C for the two Klenow fragments, and for 10 minutes. Finally, the medium is again denatured with a formamide solution and heating at 90°C for 5 minutes, after which it is placed on a polyacrylamide gel. The separation is carried out by electrophoresis at 2000 V. The gel is read using a Phosphorimager; the results obtained are given in ~~Figure 3~~ Figure 4.

Please replace paragraph number [0249] on page 49 with the following amended paragraph:

As previously, the mixture is denatured, before adding the enzyme, at 94°C for 5 minutes and is left to cool to ambient temperature. The elongation is carried out at 37°C for 60 minutes. The medium is denatured with a formamide solution and heating at 90°C for 5 minutes before being deposited on a polyacrylamide gel. The separation is carried out by electrophoresis at 1500 V. The gel is read using a Phosphorimager; the results obtained are given in ~~Figure 4~~ Figure 3.